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(6) THE SCHIZOPHRENIC THEME IN SCIENCE FICTION,

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ABSTRACT

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Title: The Schizophrenic Theme in Science Fiction

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Originally presented in 1965, this paper reports the results of a thematic study of the short stories from the first six anthologies of Galaxy Magazine of Science Fiction published between 1952 and 1962 in an attempt to identify themes that might relate to schizophrenic phenomena. Themes were rated as major or minor for each story separated into 16 categories. Space travel and alien beings were found in over half of the 123 stories but when the major themes were placed in diminishing order super technology and humor were at the top, being present in 20 percent of all stories. The author concluded from this study, as well as from an analysis of the writers of science fiction, that certain themes such as super powers, telepathy, being influenced by external agencies, conspiracy, etc., bear only a morphologic similarity to schizophrenic symptoms and do not indicate pathology in the writers or readers of this genre.

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INTRODUCTION

Perhaps closely related to the question of the schizophrenic theme in science fiction is that of the science fiction theme in schizophrenia, one which has long been recognized. In a book published in 1900 by a Swiss psychologist (Flournoy, 1900) a medium whom he had followed ten years was described as beginning to communicate with Martians in lieu of the dead. This followed shortly after the publication of a sensational book on the subject. More recently case reports have described science fiction themes such as space travel and time machines which have dominated the delusional life of patients. These productions seem readily explicable in terms of the cultural matrix; i.e., there is a profusion of science fiction themes and scientific concerns in our present culture. The eccentric inventor huddled with a super machine in the patent office became such a commonplace that it is no longer considered ludicrous enough to warrant inclusion in the Sunday supplements of the newspapers. The flying saucer pandemic has only recently relinquished its foremost place among the manifestations of the silly season. Accorded much publicity in the Washington, DC area was an elderly man (Adamski, 1965) who revealed in news conferences that he had made interplanetary trips. He claimed that Martians and Venusians with whom he had conversed at length had infiltrated the US Government. "Venusians are a friendly sort but watch out for the Martians. They are hostile," he warned.

Early explanations of delusional themes, when found related to literature, ascribed an adverse affect on the mind from reading imaginative fiction. In his description of the onset of Don Quixote's exploits, Cervantes (1955) stated of the Knight of the Rueful Countenance:

He ...gave himself up to reading books of chivalry with such ardor and avidity.. that ...he became so absorbed in his books that he spent his nights from sunset to sunrise and his days from dawn to dark poring over them; and what with little sleep and much reading, his brains got so tired that he lost his wits. His fancy grew full of what he used to read about in his books, enchantments, quarrels, battles, challenges, wooings, loves, agonies, and all sorts of impossible nonsense; and it so possessed his mind that the whole fabric of invention and fancy he read of was true, that to him no history in the world had more reality in it. In short, his wits being quite gone, he hit upon the strangest notion that ever madman in this world hit upon...that he should make a knight errant of himself...

In 1850 Worthington Hooker, a champion of the moral therapy of the times, in describing the etiologies of insanity, reiterated the deleterious effects of contumely literature.

From the discovery by Freud of an unconscious which unerringly directs or misdirects our intention such that there are no "accidents," this naive, cause-effect relationship along with most other post hoc psychiatric relationships, was challenged. Behavior came to be understood as reflecting the activities of a multifunctional ego coping with instinctual impulses and demands of reality and society, later partly conceptualized as a superego capable of punishment and prohibition. This war of the instinctual drives (pleasure principle) with the reality principle was manifested in very aspect of the personality. Dreams,

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slips of the lip, self-defeating behavior, and even literary productions could reveal to the observant Freudian more than was intended. Later analysts drew similar conclusions about hallucinations and delusions. In the life and works of Dostoevsky, Freud (1961) sees the malignant effects of an unresolved oedipal complex:

...It must be asked why there is any temptation to reckon Dostoevsky among the criminals. The answer is that it comes from his choice of material, which singles out from all others, the violent, murder, and egoistic characters, thus pointing to the existence of similar tendencies within himself...

Of interest to us, of course, is this concept that the writer manifests the neurotic part of his character in his work. Thus, we have two ideas here. The first exemplified by Don Quixote's launching on a career of knight errantry after reading books of chivalry, is that a delusion is some sort of exaggeration of the prevalent cultural theme. Hollingshead and Redlich (1958) in their study of class status and mental illness accept this idea at least in part:

...Cultural and social conditions are reflected in the content of mental illnesses. To give a simple example, in a republic, megalomaniac patients imagine themselves president and not emperor...In our culture symptoms of being influenced by spirits and demons have been replaced by beliefs that one is controlled by electricity and, most recently, by radar or atomic energy.

They warn, however, that the culture probably determines the external shape or form rather than the essential nature of the phenomenon; "The deeper relationship between symptom and culture is not understood." This idea applied to science fiction would mean that what the author writes is a reflection of these cultural trends. A related idea is the form delusions of influence have taken. With the industrial revolution the source of influence became machines rather than Mesmerism or Svengalism or demons, etc.

The other idea, exemplified by the analysis of Dostoevsky through his writings, and even better by Freud's analysis of the Schreber case, is that infantile fantasies and conflicts continue to be worked and reworked by a person, not only in symptoms but even in literary homomorphs.

PLANK'S HYPOTHESIS

A fusion of these two ideas was attempted by Robert Plank (1953, 1954), a psychiatric social worker who wrote impressionistic articles on the subject of psychotic themes in science fiction. His fusion consists of recognizing science fiction writers as sensitive "barometers" of cultural pathology who, under stress, write out their psychotic ideas as an abreactive or cathartic process. The science fiction themes are seen as "symptoms of growing discomfort in a growingly technical civilization" in which "material of that sort (psychotic) is free-floating in our culture and needs to be abreacted in this way." In his concept of a technical culture which produces discomfort in the individual,

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Plank substantiates the view expressed by Erickson (1963) that the American way of adjusting to the "machine age" is costly in terms of neurotic suffering. This then is the cultural aspect of the fusion.

Plank (1953) implies that science fiction authors have psychotic conflicts and that writing the stories helps them maintain their emotional health:

...Conclusions can be drawn from the content and flavor of the story on the mental condition of its author...By objectifying his fantasies in a work which has existence outside of his mind, the writer is able to rid himself of fantasy material, but if not so handled, might indeed get a more personal hold of him and quite possibly emerge as a symptom. . . . this would imply two things: Primary process material, which themes in science fiction break forth in psychotic manifestations, is present in the minds of the writers--and by the same token, in the readers. And abreacting this potentially psychotic material through writing (and reading) those stories deprives it of its virulence.

A possible criticism of this idea is that Plank seems to assume increasing anxiety of our age is self-evident and results in increased mental illness. He then attempts to show a morphologic similarity between the major science fiction themes and certain schizophrenic conclusions. Another possible criticism is his assumption that a morphologic similarity would imply a real connection between the two.

Plank (1953) first divides these latter trends into classes on the basis of appearance or morphology. Four types interest him in this context:

1. Realimorph: A type of literary production that depicts chains of events of the same nature as those actually observed in reality.
2. Somniomorph: Literary productions depicting events of such a nature and connected in such a manner as they typically occur in dreams. Much of the work of Kafka, for instance, is of this quality.
3. Egomorph: Attributing an unrealistically exalted role to the hero, thus reflecting the self aggrandizement that is characteristic of daydreams and the fantasies of the neurotic. Science fiction has its share.
4. Schizomorph: Literary productions that parallel the productions of a schizophrenic (especially the paranoid schizophrenic) in such a manner that a person who would believe that the events depicted in those stories could happen in real life--and more specifically, that they could or did happen to him--would on the strength of that be diagnosed as schizophrenic. Old Black Joe's voices (Gone are my friends from the cotton fields away,... I hear their gentle voices calling, Old Black Joe) are examples of a schizomorph turn of phrase, but it is very rare in literature to find a schizomorph motif except one

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as sketchy and fleeting as this. Elaborate schizomorph productions are, however, surprisingly prevalent in science fiction.

After a brief and generally satisfactory definition of science fiction as "...All those works of literature...in which a fictitious scientific or technologic discovery or invention is an essential feature of the content," and also "...those works that are so labeled by their authors," Plank (1953) describes three motifs which "are found with paramount frequency in current science fiction."

These motifs are space travel, removal from communion with the living (survival after a catastrophe), and influencing machines. In the case of space travel, he sees a more cogent meaning than that this was and is along with atomic energy the most talked about scientific advancement of our times. Rather he saw this as the schizophrenic penchant for distancing. He did point out that space travel occurs in the delusions of some patients. His proposed morphologic similarity is unconvincing and it seems more likely that the topic is really an obvious next step in man's scientific evolution. Perhaps a better similarity might be seen in Minkowski's (Arieti, 1950) concept of schizophrenia. In his major work, *La Schizophrenie*, he states that the crucial point of the schizophrenic syndrome is "the loss of vital contact with reality..". In other studies he focuses his attention on the alteration of the sense of time and space in schizophrenics. Whereas space expands to include the whole category of the objects that are involved in the patient's delusions, time is blocked and limited to the present.

In his discussion of the theme of removal from communion with the living (or survival of a remnant after catastrophe) as morphologically similar to the isolation reported by schizophrenics, he is again unconvincing. The essence of a schizophrenic's isolation is that it occurs while he is among people who cannot understand his torments.

Finally, he gives examples of delusions of influence both in his patients and in science fiction stories. By use of mind machines and telepathy, people are coerced and controlled. In this instance, there is the appearance of similarity. In another article, Plank (1954) describes the "compulsive" need of the science fiction authors to deal with communications. He sees as the common denominator of all the means of human communication developed in the various types of stories as one of "short-cutting" the more conventional medium of language. This shift in emphasis, he claims, parallels the breakdown of understanding in the world which began in 1914.

SCIENCE FICTION WRITERS

On these bases, then, Plank erects his hypothesis of psychotic themes in science fiction. Data available on the science fiction writers themselves does not especially support Plank's hypothesis. Numerous popular magazines have given individual examples of the social prominence of the science fiction readers and writers. Included in the former, for example, were Albert Einstein, J. Robert Oppenheimer, Herman J. Muller (1946 Nobel Prize winner in medicine) and Frederick Schumann (professor of political science at Williams College) and Arthur C. Clarke. Perhaps the best known among the latter for scientific work

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outside of science fiction is Dr. Leo Szilard, the nuclear physicist who with Enrico Fermi fathered the atomic bomb. Others include astronomer and cosmologist, Fred Hoyle, and scientist writer, Isaac Asimov, teacher of biochemistry at Boston University School of Medicine until 1958 when he left his position to devote full time to writing.

As a group, science fiction writers contain a greater portion with formal scientific or engineering training than is the case with authors of other types. According to L. Sprague DeCamp, a top writer himself, of the 18 leading contemporary writers of science fiction in 1953, eight had a scientific background, four were engaged in such work at the time and two held Ph.d's in Chemistry.

A more objective study was done by Drevdahl and Cattell (1958), psychologists famous for their studies on the personalities of creative individuals. They obtained personality profiles on 153 artists and writers. The writers were made up of two groups, one science fiction containing 58 people and the other not science fiction containing 31 people. The science fiction-subgroup scored above the general population on stability and control but not significantly so as did the other writers and artists. They, as well as the artists, were above the general population in tenseness and restlessness:

"The science fiction writers are significantly more radical, are less sensitive emotionally, and less stable and controlled than either non-science fiction writers or artists. They are also significantly less concerned with group standards but are more psychodynamic, intelligent, dominant, and surgent than other authors."

"Science fiction writers appear to be somewhat more radical than non-science fiction writers or artists and this may be necessary in the demands that science fiction makes for unusualness of an intellectual nature. Their tendency to be less emotionally sensitive may further reflect their involvement in a world that has no present-day counterpart and that would be a source of material for other writers and artists who very often elaborate and interpret present day "reality." Dominance and surgence in a greater degree are needed to "put across" a radically different and unusual story or point of view.

These studies would hardly substantiate the type of person expected by Plank unless we assume that writing science fiction is so therapeutic as to make the authors more stable than the normal population.

SCIENCE FICTION LITERATURE

I should now like to look at the science fiction literature itself. The intimate relationship between a culture and its fiction has long been known. Parrington in his monumental study, Main Currents in American Thought, has documented the function of literature as social criticism. Examples come readily to mind. Plato's Republic, Orwell's 1984, and Huxley's Brave New World are classic examples. In a content analysis of scientific fiction, Treguboff (1955), a psychologist, established the fact that this was true also of science fiction.

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She also points out that science fiction has become a mass medium. She claims that between 1938 and 1953 the number of magazines which published science fiction increased more than 600%. At the time of her study (the golden age of science fiction) estimates ran as high as 6 million readers of science fiction. Hirsch in a content analysis of samples of science fiction published between 1926 and 1950 (a total of 300 stories) concludes that "...Science fiction is the major contemporary popular medium toward the expression of social criticism and the building of social utopias and counter utopias."

METHOD In preparation for this paper I read the short stories taken from Galaxy Magazine of Science Fiction published during the "Golden Age of Science Fiction" in the 6 H. L. Gold anthologies, picking out major and minor themes which I broke down into 16 categories. The later Galaxy anthologies were not included due to the fact that H. L. Gold was replaced by Frederick Pohl as editor and anthologizer. The bias of having one editor choosing all the stories is unavoidable but not necessarily detrimental since this same bias must be reflected in the millions of readers of Galaxy magazines and anthologies. Galaxy was also chosen because not only was it the most popular in sales of the three leading science fiction magazines, but in the case of the other two one did not anthologize sufficiently (Analog, formerly called Astounding Science Fiction) or also included fantasy stories (The Magazine of Fantasy and Science Fiction).

In the six volumes there were 123 short stories and 2042 pages. The first two volumes had twice as many stories as the last four which had about 15 stories each. The categories were as follows:

1. Space travel: This was listed as minor if any passing reference were made to it or if it could be implied. That is to say from references to interplanetary travel or interaction with alien cultures. If it were the major theme, for example, the hardships of close confinement in a space ship might be the whole story, it was so listed as major. This question of whether or not a theme was integral to the plot or not was generally the one followed in deciding if the theme were major or minor.
2. Catastrophe: World or cultural destruction or threat of it whether by chance, physical forces, alien invasion, or the result of man's own folly were generally considered major; that is, they were usually found indispensable to the plot. If, however, the destruction were mentioned only in passing as a historical phase much like the destruction of ancient Rome, it was listed as minor.
3. Supertechnology: This included such developments as super-machines or weapons, androids (manufactured people), and super sociological advances. If the story hinged on them they were listed as major, but if they could be listed as only giving a background mood to the story they were listed as minor.
4. Time travel: The development of the time machine or time

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travel was reserved for this category rather than being placed under supertechnology and the same rules applied to it in deciding whether it were major or minor. In some cases, "time viewing" occurred but this type was also included in this category.

5. Superpowers: In this category were included the various "psionic" or ESP powers (teleportation, telekinesis, etc.) with the exception of telepathy which was listed separately since it affords such a "plausible" explanation for auditory hallucinations. Also included in this category were supergenius, supermemory, supermorals, superadaptability, etc.

6. Telepathy: As noted, this was listed separately from the superpowers. If it were used to hypnotize or, control, the story was also listed under the category of influence.

7. Influence: In this category were placed all the agents of influence, possession, mind theft and similar concepts. These agents might include physical ones, alien entities or external sources such as telepathy. Closely allied to this theme was dehumanization or depersonalization and many were listed in both categories. In some cases possession or influence was accompanied by heightened humanity or well-being as in the typical case of a symbiote which brought out a person's latent superpowers and these were listed only in the influence category.

8. Dehumanization: Loss of humanness, sometimes by transformation, physical or mental. Cases in which depersonalization or feelings of unreality occurred were also included in this category.

9. Conspiracy or persecution: This theme was also associated with influence or dehumanization themes but not necessarily. For example, it occurred independently in "The Misogynist," in which a conspiracy of women against men is depicted and in "Or All the Seas with Oysters," in which aliens bent on conquering the world, assumed the forms of ordinary objects such as coat hangers. On the other hand, possession or influence occurred outside of this category when the possessors were benign or uninvolved in man's fate. If this distinction is not made, persecution and influence might be considered together.

10. Isolation: In this category were listed the "Last Man on Earth" or "Lost Colony" or similar concepts described by Plank as being of "great frequency." Also included were stories in which isolation or loneliness were explicitly or implicitly stated to be themes. Loneliness is exemplified by "A Saucer of Loneliness" in which a lonely woman who is ugly meets a lonely man who is ugly and isolation is seen in "Caretaker" in which a man is marooned on an alien planet.

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11. Humor: Some stories were told merely for humor or primarily for humor and might or might not have had the other elements listed.

12. Totalitarian government: This category was included as a test of the social criticism aspect of science fiction; that is to say, it was wondered how often one might find the "garri-son state" described. This was surprisingly infrequent. Whenever a government was described as being intolerant or repressive, it was included. Stories otherwise usually assumed a similar government to our own or a multiplicity of types.

13. ALIENS, Total. In this category were listed all the stories that had any aliens.

14: ALIENS, Evil. In this category were listed those stories in which an alien was described as being evil or hostile to man.

13. Aliens, Benign. In this category were listed those stories in which the alien was seen as helpful or friendly to man.

13. Aliens, Humanoid. In this category were listed those stories in which the alien has a human-like form.

13. Aliens, Non-humanoid. In this group were listed those categories in which the alien did not have the form of a human.

Results of this impressionistic tabulation are depicted in TABLES 1 and 2 indicating that the overwhelming concern of science fiction writers is the impact on society of burgeoning technology and the presence of the alien in our midst. Interestingly enough, these themes are often dealt with humorously (32 per cent). Not shown here was a chronological study of the supertechnology theme which revealed that it has steadily gained in popularity as a major theme. It was a major theme in 15 per cent of the stories of the first anthology, 7 per cent of the second, 20 per cent of the third, 27 per cent of the fourth, 33 per cent of the fifth, and 43 per cent of the sixth anthology. The superpowers theme (including telepathy) has steadily declined, perhaps indicating a trend toward trust in machines rather than in inherent or latent abilities. This emphasis on technology is possibly related to the notion of scientific millennialism, a recrudescence of the Victorian religious millennialism which was virtually destroyed by the bitter experiences of two world wars. Science fiction writers seem to be the spokesmen for that segment of society which still accepts the idea of the perfectibility of man now to be achieved through the machine.

Aliens of all sorts have remained steadily as prop characters, but have declined as major themes of themselves (evil aliens declined from 9 per cent to 0 per cent, benign aliens from 30 per cent to 0 per cent, humanoid aliens from 15 per cent to 0 per cent, and non-humanoid aliens of themselves were never major themes when the first and last anthologies were compared). Of the 68 aliens, 47 were benign and 25 evil; 49 were non-humanoid and 25 humanoid. The

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TABLE 1

Categories arranged according to appearance of a theme in the 123 stories in diminishing order.

<u>Category</u>	<u>Nr. of Stories with Theme</u>	<u>% of Stories with Theme</u>
1. Space Travel	72	59
2. Alien - Total	68	54
3. Super Technology	50	41
4. Alien - Non Humanoid	49	40
5. Alien - Benign	47	38
6. Humor	39	32
7. Super Powers	34	28
8. Telepathy	33	27
9. Isolation	29	24
10. Influence	26	21
11. Alien - Evil	25	20
12. Alien - Humanoid	25	20
13. Dehumanization	26	13
14. Catastrophe	15	12
15. Time Travel	15	12
16. Persecution (Conspiracy)	12	10
17. Totalitarian Government	9	7

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TABLE 2

Categories arranged according to appearance of a
major theme in the 123 stories in diminishing order

<u>Category</u>	<u>Nr. of Stories with Major Theme</u>	<u>% of Stories with Major Theme</u>
1. Super Technology	25	20
2. Humor	24	20
3. Alien - Total	20	16
4. Influence	18	15
5. Time Travel	14	11
6. Super Powers	23	11
7. Alien - Benign	12	10
8. Dehumanization	11	9
9. Catastrophe	10	8
10. Space Travel	9	7
11. Persecution (Conspiracy)	8	7
12. Alien - Humanoid	8	7
13. Isolation	6	5
14. Alien - Evil	6	5
15. Telepathy	4	3
16. Totalitarian Government	2	2
17. Alien - Non - Humanoid	0	0

evil aliens were seen as non-humanoid five times as frequently as they were seen as humanoid (20:4), while the benign aliens were about evenly divided between non-humanoid and humanoid (32:22). These findings are difficult to interpret but seem to indicate a more sympathetic understanding of the alien.

Influence and dehumanization themes have declined (18 and 12 per cent respectively in the first anthology and 7 and 0 per cent respectively in the sixth anthology as major themes), but persecution or conspiracy has been somewhat variable. When the influence, dehumanization, and persecution themes were lumped together, 42 stories (34 per cent) had them as themes and in 2/3 they were major themes. This would seem to corroborate Plank's hypothesis of the paranoid character of science fiction.

Space travel, although frequently used for background effect, was a major theme in only nine stories, mostly in the early anthologies. Apparently fact is so rapidly encroaching on fantasy that this theme's allure is fading. A comparison of sexual themes with the paranoid themes (influence dehumanization, persecution) failed to reveal any correlation; that is to say, sex as a theme was found about equally frequently in all stories except the humorous where it was slightly more frequently found. Thus, this study fails to throw any light on the Freudian theory of paranoia as being related to repressed homosexuality. It does show that the science fiction writers have gained an important insight into sexuality: you might as well joke about it.

CONCLUSION

Let me make a preliminary apologia for the value of a thematic study of the delusional in science fiction. The value of such a study of schizophrenia itself has been most eloquently attested to in the work of Binswanger (1960) who tries "to explain the delusional world of the patient as the evolving of a theme (terror, for instance, in the case of Suzanne Urban, who is the prisoner of her own theme of terror and becomes the prisoner of a world of terror). Fear of filling the body and becoming fat in order to compensate for an empty existence is the theme in the case of Ellen West." A similar view of delusions is held by Medard Boss (1963) who sees the patient as being trapped in one of the realms of existence, the physical (Umwelt), the interpersonal (Mitwelt), or the intrapsychic (Eigenwelt) when he should be living in all of them. In describing the copromantic hallucinations and delusions of a "painfully well-bred aesthete, hyperclean crystal collector," he stated that they can "be understood on the basis of the condition of this whole existence, of its having fallen prey to the realm of the excremental."

Finally, to answer the question of what in science fiction is schizophrenic, one must say it is the appearance of similarity, a morphological similarity. This appearance is found in mythology, fairy tales, folk lore, some religions, and even science. The unifying experience of all these disparate elements is the experience of the unknown or the dimly perceived and a human response to it, a desire to grasp it and to dispell its threat by an explanation. The term threat was used because the unknown is invariably apprehended as a threat. The response to threat is almost a glandular one: fright - fight - anger. It does not seem unusual, then, that some science fiction stories might have a paranoid "appearance." Freud postulated religion as being a societal obsessive compulsive neurosis on the basis of its similarity to one of the outcomes of an unsuccessful Oedipal configuration. Theologians have not been notably persuaded

of the "cure" he proposed for this malady.

As far as the science fiction writer himself, he is the purveyor of new ideas in a salable form. He has found a way of escaping the fate of similar pioneers described in the Organization Man: "A really new idea offends current agreement - it wouldn't be a new idea if it didn't - and the group, impelled as it is to agreement, is instinctively hostile to that which is divisive." But the main thing about the science fiction writer is that he is emancipated. The creative use of his imagination is available to him. His access to free association might make analytic patients envious. This very freedom of access to new ideas as well as the deeper unconscious associations might produce alarm in the more inhibited who would label this "pathological." The creative use to which this material is put, however, should allay these alarmists.

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BIBLIOGRAPHY

1. Arieti, Silvano: The American Handbook of Psychiatry, Vol 1, Chapter 23, Schizophrenia: Symptomatology and Mechanism, Basic Books, Inc., New York, 1050, pp. 458-459.
2. Binswanger, In Existence, Rollo May, Ed., Basic Books 1961.
3. Bocs, Medard; Psychoanalysis and Daseinsanalysis, Basic Books, Inc., New York, London, 1963. pp. 276-277.
4. Cervantes, Miguel; Don Quixote de la Mancha. Part One, pp. 3-4, John Ormsby translation in Grolier Classics, 1955.
5. Davidson, Avrom: "Or All the Seas with Oysters," The Fourth Galaxy Reader. H. L. Gold (Ed), Doubleday & Co. Inc., Garden City, N.Y., 1959.
6. DeCamp, L. Sprague: Science Fiction Handbook, Hermitage House, 1953, pp. 145ff.
7. Drevdahl, John E, and Cattell, Raymond B.: "Personality and Creativity in Artists and Writers," J. Clin. Psychol. 14: 107-111, 1958.
8. Ekstein, Rudolf, and Wright, Dorothy; "The Space Child," Bulletin of the Menninger Clinic,. 16: 1952.
9. Ekstein, Rudolf: "The Space Child's Time Machine," Paper presented at Annual Meeting of Am. Orthopsychiatric Assoc., 1953.
10. Erikson, Erik H.: Childhood and Society, Chapter 8, Reflections on the American Identity, W. W. Norton and Co., Inc., New York, Second Edition, 1963.
11. Fenichel, Otto: The Psychoanalytic Theory of Neurosis, Chapter XVII. Schizophrenia, W. W. Norton, Co., Inc., New York, 1945.
12. Flammarion, C.: Le Planete Mars et ses conditions d'habitabilite, Paris, 1892 (Pub. unknown).
13. Flournoy, Theodore; From India to the Planet Mars, Harper and Brother, New York and London, 1900.
14. Freud, Sigmund; "Dostoevsky and Parricide (1928)" in The Complete Psychological Works of Sigmund Freud, James Strachey, transl., Hogarth Press, Ltd., London, 1961.
15. Gold, H. L. (Ed): The Galaxy Reader, Crown Pub. Inc., New York, 1952
16. Gold, H. L. (ED): The Second Galaxy Reader, Crown Pub. Inc., New York, 1954.

F. D. Jones, M.D: Schizophrenia in Science Fiction

17. Gold, H. L. (Ed): The Third Galaxy Reader, Doubleday & Co., Garden City, New York, 1958.
18. Gold, H. L. (Ed): The Fourth Galaxy Reader, Doubleday & Co., Garden City, New York, 1959.
19. Gold, H. L. (Ed): The Fifth Galaxy Reader, Doubleday & Co., Garden City, New York, 1961.
20. Gold, H. L. (Ed): The Sixth Galaxy Reader, Doubleday & Co., Garden City, New York 1962.
21. Gunn, James E.: "The Misogynist," The Second Galaxy Reader, Crown Pub. Inc., H. L. Gold (Ed), New York, 1954.
22. Hirsch, Walter: "The Image of the Scientist in Science Fiction; A Content Analysis," Am. J. Soc., pp. 506-512. March 1958.
23. Hollingshead, A. B. and Redlich, F. C.: Social Class and Mental Illness: A Community Study, John Wiley & sons, Inc., New York, 1958, pp. 359-360.
24. Hooker, Worthington; Physician and Patient, Baker and Scribner, New York, 1849, pp. 322-323.
25. Jung, Carl G.: Flying saucers: A Modern Myth of Things Seen In The Skies. Transl. from german by R. F. C. Hull Harcourt, Brace, New York, 1959.
26. Obituary Section, The Washington Daily News, Friday, April 30, 1965, George Adamski.
27. Plank, Robert: "Communication in Science Fiction," Etc., Vol 11, pp. 16-20, 1953.
28. Plank, Robert: The Reproduction of Psychosis in Science Fiction," Internat. J. Med. Clin. Pract., 1954, 167: 407-421.
29. Schmitz, James H.: "Caretaker," The Second Galaxy Reader, H. L. Gold (Ed), Crown Pub., Inc., New York, 1954.
30. Sturgeon, Theodore; "Saucer of Loneliness," The Second Galaxy Reader, H. L. Gold (Ed), Crown Pub., Inc., New York, 1954.
31. Tausk, Victor: "On the Origin of the 'Influencing Machine' in Schizophrenia," Psa. Quart. 2: 519-556, 1933, or in The Psychoanalytic Reader, Robt. Fliess (Ed.), International Univ Press, Inc., New York,, 1962, pp. 31-64.
32. Treguboff, Zoe Liles: A Study of Social Criticism in Popular

F. D. Jones, M.D: Schizophrenia in Science Fiction

Fiction: A Content Analysis of Science Fiction, Dissertation
at U. of Cal. at Los Angeles, 1955, (Obtained on loan).

33. Whyte, William H.: The Organization Man, Doubleday Anchor
Books, Doubleday & Co., Inc., Garden City, New York, 1956